

## A NEW SPECIES OF THE GENUS *TRICHOPHYA* (COLEOPTERA, STAPHYLINIDAE, TRICHOPHYINAE) FROM CHINA

ZHENG Fa-Ke, WANG Cui-Cui

Life Science College, China West Normal University, Nanchong 637002, China

**Abstract** A new species of the genus *Trichophya*, *T. piankou*, is described and illustrated from Sichuan, China. The male sexual characters of *T. tenuis* Zheng is described for the first time. All type and examined specimens are deposited in the Life Science College, China West Normal University, Nanchong, Sichuan, China.

**Key words** Staphylinidae, Trichophyinae, *Trichophya*, new species, male sexual characters, China.

*Trichophya* Mannerheim, 1830 is the only genus of the subfamily Trichophyinae and is a peculiar staphylinid group. It can be easily recognized by the following characters: antennae with the first two segments strongly dilated and all the following ones very slender and furnished with long fine hairs; elytral epipleura not separated by a keel from the dorsal surface, and several other derived states of the adult and the larva (Ashe and Newton, 1993; Naomi, 1995).

The genus is a small genus of only known 17 species recorded in the Palaearctic, the Nearctic, and the Oriental Regions. Of these species only 3 were found in China (Zheng, 1987; Herman, 2001; Shibata, 2001; Assing, 2003, 2006).

This paper describes a new species *Trichophya piankou* sp. nov. from Sichuan, China and offers some color photos to illustrate the characteristics which are important for species identification. The male sexual characters of *T. tenuis* Zheng is also described for the first time.

All the type specimens and other materials examined are deposited in the Life Science College, China West Normal University, Nanchong, Sichuan, China.

***Trichophya piankou* sp. nov.** (Figs 1–7)

**Diagnosis.** This species is very similar to *T. tenuis* Zheng from Mt. Emei, Emeishan City and Wolong Nature Reserves, Wenchuan County, Sichuan, but can be easily recognized by its shorter and broader body with dark brown to black body color, pronotum and elytra are more strongly and granularly punctuate, and the aedeagus is completely different in shape.

**Description.** Head black, pronotum and elytra dark brown, abdomen dark brown with posterior margin of each segment paler, reddish brown; antennae, mouthparts and legs yellowish brown to reddish brown; body slightly shining, whole surface covered with short golden pubescence.

Length 2.1–2.3 mm.

**Male.** Head subtriangular, narrowed anteriorly, wider than long (ratio 1.29), shorter (ratio 0.83) and narrower (ratio 0.68) than pronotum. Labrum arcuately produced, clypeus with anterior margin slightly rounded, frontoclypeal suture distinct, surface of vertex sparsely and finely punctured and with distinct microsculpture of meshes on interspace of punctures. Eyes each situated at posterolateral corner of head, relatively small but well convex. Antennae very slender and sparsely setous, reaching anterior third of elytra when reclined; segment 1 robust and broad, narrowed at base; segment 2 pear-shaped, slightly narrower than segment 1; segments 3–4 baculiform, each much narrower than segment 2; segments 5–10 each narrowed in its apical third, nearly spindle-shaped; segment 11 elongate-elliptical, but slightly asymmetrical; relative length of each segment: 6.0:4.5:5.0:5.0:5.5:5.0:5.0:4.0:4.0:4.0:6.0.

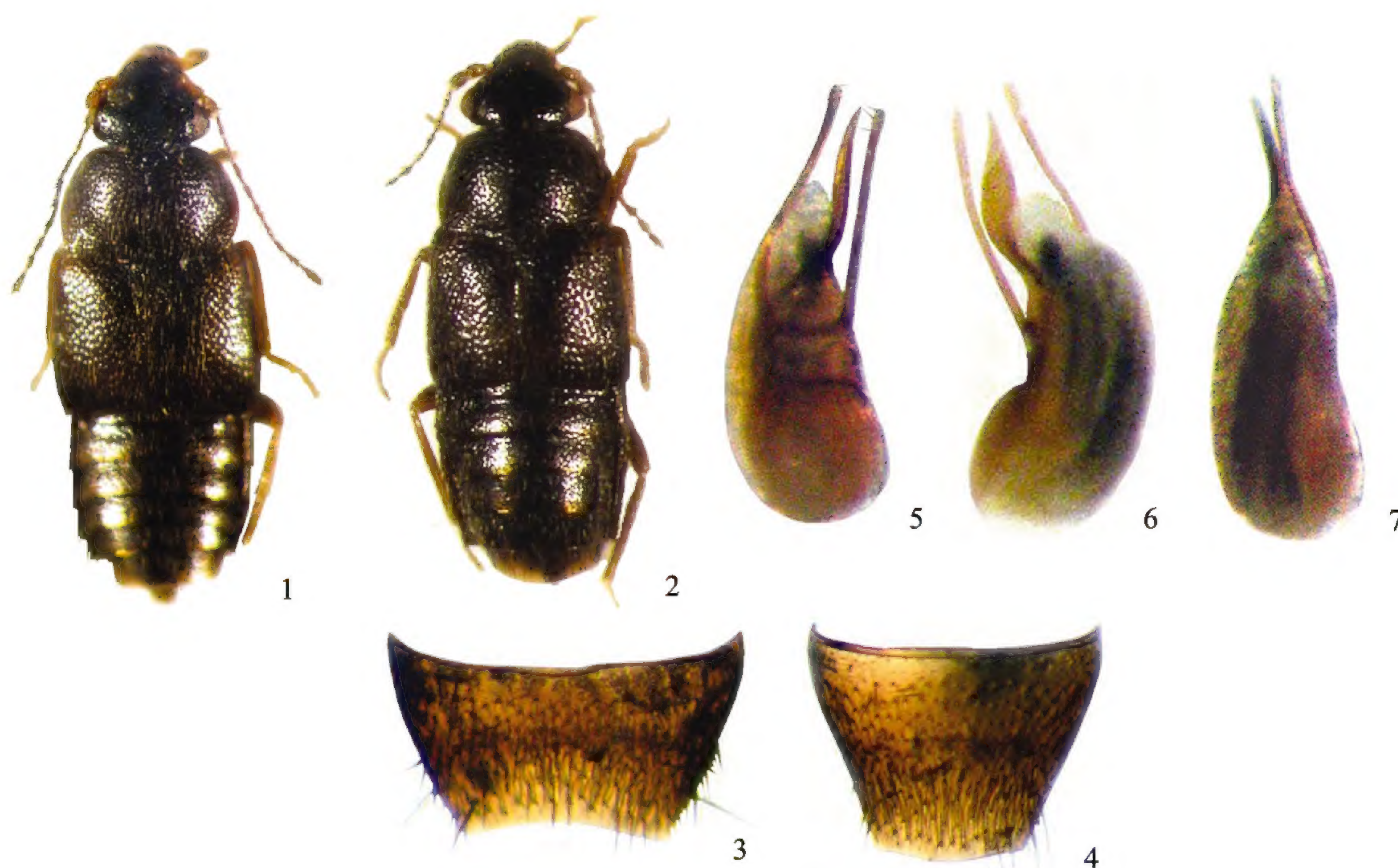
Pronotum wider than long (ratio 1.67), shorter (ratio 0.67) and narrower (ratio 0.87) than elytra; anterior margin broadly and arcuately emarginate, lateral margins rounded, posterior margin weakly trisinate; widest at about middle; surface with puncture coarser than that on head and distinctly granulate, microsculpture irregular.

Scutellum subtriangular, punctulate and pubescent.

Elytra wider than long (ratio 1.27), slightly widened apicad; lateral margins weakly rounded, posterior margin arcuately emarginate at middle; surface with puncture similar to that on pronotum, microsculpture vague. Wings developed.

Abdomen slightly narrower (ratio 0.93) than elytra, segments 3–7 with well developed and erect paratergites; punctations of tergites fine and sparse, interspaces of punctures with indistinct microsculpture of meshes; sternite 8 slightly emarginate at posterior margin.





Figs 1 – 7. *Trichophya piankou* sp. nov. 1 – 2. Dorsal habitus. 3 – 4. Sternite 8. 5 – 7. Aedeagus. 1, 3. Male. 2, 4. Female. 5. Ventral view. 6. Lateral view. 7. Dorsal view.

Aedeagus distinctly asymmetrical; ventral process of median lobe in middle strongly widened, in apical portion evenly curved to acute apex; parameres slightly fine, apex bearing four setae.

Female. Similar to male, but segments 1 – 4 of protarsus slightly narrower than that of the male, sternite 8 angularly produced at posterior margin.

Holotype male, China, Sichuan, Piankou Nature Reserve, Beichuan County (32° 02' – 32° 12' N, 104° 10' – 104° 26' E; alt. 1 535 m), 24 Sep. 2005, collected by WANG Cui-Cui. Paratypes: 13 ♂♂,

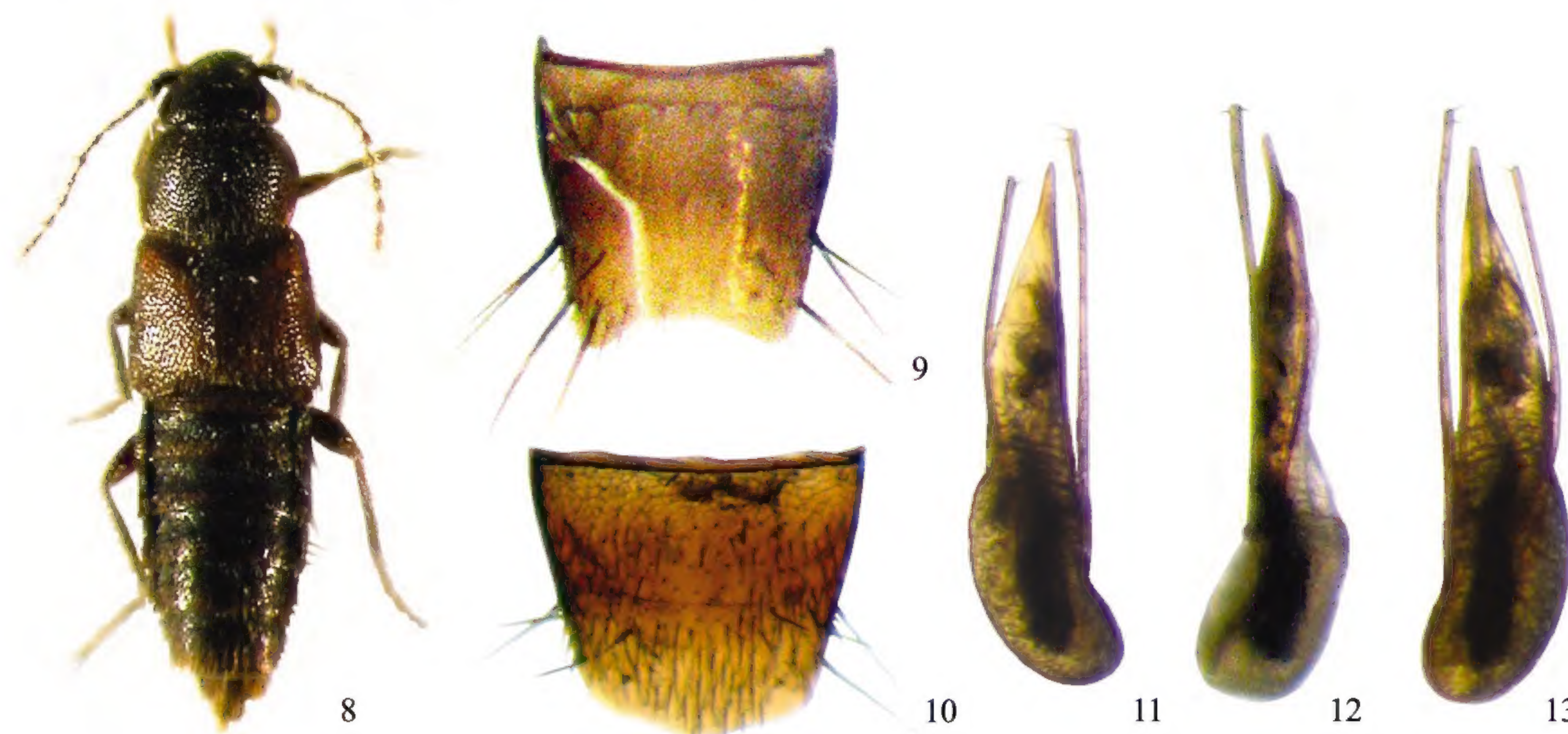
16 ♀♀, same data as holotype.

Habitat and Distribution. Habitat of the species is not clear; it is at present known from the type locality in Northern Sichuan.

Etymology. The specific epithet is from the Chinese name of the type locality (Piankou Nature Reserve), “Piankou”.

***Trichophya tenuis* Zheng (Figs 8 – 13)**

Zheng, 1987: 97; Herman, 2001: 1066; Löbl and Smetana, 2004: 353. (China, Sichuan)



Figs 8 – 13. *Trichophya tenuis* Zheng. 8. Dorsal habitus. 9 – 10. Sternite 8. 11 – 13. Aedeagus. 8 – 9. Male. 10. Female. 11. Ventral view. 12. Lateral view. 13. Dorsal view.



Specimens examined. 2 ♀♀ (type specimens), Sichuan, Mt. Emei, Emeishan City and Wolong Nature Reserve, Wenchuan County. 2 ♂♂, Mt. Emei, Emeishan City, 1 120 – 2 070 m, 25 – 26 July 1983, LU Ying; 2 ♂♂, 1 ♀, Wolong Nature Reserve, Wenchuan County, 11 – 13 July 1985, collected by WANG Ping.

Comments. This is the first record of the male of *Trichophya tenuis* Zheng.

Male. Similar to female, but protarsal segments 1–4 moderately widened, sternite 8 broadly and deeply, arcuately emarginate at posterior margin (in female is slightly angularly produced at posterior margin).

Aedeagus slightly asymmetrical; median lobe gradually narrowed towards apical portion; parameres slender, unequal length, each bearing four setae at apex; internal sac as in Figs 11–13.

**Acknowledgements** We are heartily grateful to Prof. Ashe, J. S. and Dr. Newton, A. F., Snow Entomological Museum, University of Kansas, Lawrence, Kansas, and Department of Zoology, Field Museum of Natural History, Chicago, Illinois, USA; Dr. Assing, V., Gabelsbergerstr. 2, D-30163 Hannover, Germany; Dr. Naomi, S. I., Natural History Museum and Institute, Chiba, 955-2 Aobacho, Chuoku, Chiba, Japan; Prof. Watanabe, Y., Laboratory of Insect Resources, Tokyo University of Agriculture, Atsugi, Kanagawa, Japan, and Dr. Shibata, Y., Tsurukawa 3-8-13, Machida City, Tokyo 195-0061, Japan, for their kind help with the literature.

## REFERENCES

Ashe, J. S. and Newton, Jr. A. F. 1993. Larvae of *Trichophya* and

phylogeny of the tachyporine group of subfamilies (Coleoptera: Staphylinidae) with a review, new species and characterization of the Trichophyinae. *Systematic Entomology*, 18 (4): 267–286.

Assing, V. 2003. On the identity of *Trichophya huttoni* Wollaston (Coleoptera: Staphylinidae: Trichophyinae). *Linzer Biologische Beiträge*, 35 (1): 515–518.

Assing, V. 2006. New species and records of Staphylinidae from Turkey IV, with six new synonymies (Coleoptera: Staphylinidae). *Koleopterologische Rundschau*, 76: 223–276.

Cameron, M. 1932. The Fauna of British India including Ceylon and Burma. Coleoptera. Staphylinidae. Taylor and Francis, London. 3: xiii + 443 pp.

Cameron, M. 1944. Descriptions of new Staphylinidae (Coleoptera). *The Proceedings of the Royal Entomological Society of London (B)*, 13 (1–2): 11–16.

Cameron, M. 1950. New species of Staphylinidae (Col.) from the Malay Peninsula. *The Annals and Magazine of Natural History*, 3 (12): 1–40.

Miyashita, K. 1997. On the male of *Trichophya japonica* (Coleoptera: Staphylinidae). *Elytra*, 25 (1): 84.

Naomi, S. I. 1995. Description of a new species of genus *Trichophya* (Coleoptera: Staphylinidae) from Japan. In: Watanabe, Y., Satô, M. and Owada, M. (eds.), Beetles and Nature. Special Bulletin of the Japanese Society of Coleopterology (Tokyo), 4: 347–350.

Naomi, S. I. 1996. Two new species of the family Staphylinidae (Coleoptera) from Japan. *New Entomologist*, 45 (3–4): 69–73.

Herman, L. H. 2001. Catalog of the Staphylinidae (Insecta: Coleoptera). 1758 to the end of the second millennium II. Tachyporine group. *Bulletin of the American Museum of Natural History*, 265: 651–1 066.

Löbl, I. and Smetna, A. 2004. Catalogue of Palaearctic Coleoptera. Vol. 2: Hydrophiloidae-Histeroidea-Staphylinoidae. Apollo Books, Stenstrup. pp. 1–942.

Watanabe, Y. and Shibata, Y. 1962. Description of a new species of the genus *Trichophya* Mannerheim from Japan (Col.: Staphylinidae). *Journal of Agricultural Science (Tokyo) Nogyo Daigaku*, 7 (3–4): 95–96.

Shibata, Y. 2001. A new species of the genus *Trichophya* (Coleoptera: Staphylinidae) from Taiwan. *Elytra*, 29 (2): 352–357.

Zheng, F-K 1987. A new species and a new record of genus *Trichophya* Mannerheim from China (Coleoptera: Staphylinidae: Trichophyinae). *Acta Entomologica Sinica*, 30 (1): 97–99.

## 中国毛角隐翅虫属一新种（鞘翅目，隐翅虫科，毛角隐翅虫亚科）

郑发科 王翠翠

西华师范大学生命科学学院 南充 637002

**摘要** 记述了中国毛角隐翅虫属 *Trichophya* Mannerheim 1 新种，片口毛角隐翅虫 *Trichophya piankou* sp. nov.; 首次提供了细点毛角隐翅虫 *Trichophya tenuis* Zheng 的雄性特征。

片口毛角隐翅虫，新种 *Trichophya piankou* sp. nov. (图 1~7)

新种与四川峨眉山和卧龙自然保护区的细点毛角隐翅虫 *Trichophya tenuis* Zheng 很相似，区别为：体较短，体色黑褐，前胸和鞘翅的细粒更明显，雄性外生殖器形状不同。

正模 ♂，四川北川县片口自然保护区，2005-09-24，王

翠翠采。副模：13 ♂♂，16 ♀♀，采集记录同正模。

词源：种名出自模式产地（片口自然保护区）的中文名称，“片口”。

细点毛角隐翅虫 *Trichophya tenuis* Zheng, 雄性 (图 8~13)

本种的雄性与雌性相似，但前跗第 1~4 节中等膨大，第 8 腹板后缘宽深弓形凹缘，与之有别。

检视标本：2 ♀♀（模式标本），四川峨眉山和汶川县卧龙自然保护区。2 ♂♂，四川峨眉山，1983-07-25~26，卢英采；2 ♂♂，1 ♀，四川汶川县卧龙自然保护区，王萍采。

**关键词** 隐翅虫科，毛角隐翅虫亚科，毛角隐翅虫属，新种，中国。

中图分类号 Q969.484.4